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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,840	10/05/2001	Steven W. Trovinger	10013506	1610

7590 07/01/2004

HEWLETT-PACKARD COMPANY
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EXAMINER

KIM, EUGENE LEE

ART UNIT PAPER NUMBER

3721

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,840

Applicant(s)

TROVINGER ET AL.

Examiner

Eugene L Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10, 12, 14, 15 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10, 12, 14, 15, 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-10, 12, 14, 15, 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trovinger in view of Shingo and Lane.

Trovinger substantially show the claimed subject matter including a fold blade 217, a fold roller 232, drive means for moving at least one of the blade means or roller means as shown in figs 16-22 so that the fold roller passes around the folding blade 217.

Trovinger shows fold flap means 230 and discloses that the pinch wheel assemblies which the contain the fold roller means 232 may be determined by the various widths of the sheets to be folded so that a number of folding wheel assemblies may be used (p. 22 bottom) which reads on the sub rollers. The folder assembly includes a plurality of fold rollers as shown in figs 14 -15 (p. 23 3rd paragraph) and the fold rollers comprise complementary spring loaded disks (p. 24 lines 4+). Trovinger also discloses that the drive means can cause the fold rollers to slide along the fold (p. 26 bottom to top of p. 27) by putting the fold rollers on pivoting arms which reads on moving the fold roller and fold relative to one another. Trovinger does not show the folding blade having a rounded folded surface or the motion of the fold blade as claimed. Shingo shows a folding blade 17 with a rounded edge 18 wherein the rounded edge is in contact with the workpiece.

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This is so the film is folded accurately without producing a crease that could injure the workpiece (col 2 lines 1+). Shingo shows a blade that is mounted on a slider 36 which is adjustable within recess 35 adjusting the blade as required. Since the blade comprises both the slider and blade means in combination, this reads on two sections of the blade movable since the slider and blade are both movable. Lane shows a fold blade 21 that moves past the major axes of fold rollers 36, 37 so that the blade would prevent irregular turning or folding of the edges (col 2 lines 13+). Lane does not teach the blade moving vertically upwardly but shows the blade moving vertically downwardly. The actual upward movement of the blade is a matter of design choice and solves no stated problem. See in re Kuhle, 188 USPQ 7 (CCPA 1975). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Trovinger with a round edge blade and fold movements as taught by Shingo and Lane respectively to fold material in a precise manner without turning the paper over and damaging the workpiece.

Examiner takes official notice that it is well known in the art to pivot elements for adjustability purposes. Regarding the limitations regarding adjustability, the examiner notes that the provision of adjustability, where needed, is not a patentable advance. See in re Stevens, 101 USPQ 284 (CCPA 1954).

3. Applicant's arguments filed 6/4/2004 have been fully considered but they are not persuasive. Regarding applicants argument regarding the rounded fold conforms to a shape of the fold blade, examiner maintains that Shingo shows this limitation. Since

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Shingo forms a rounded fold with round edge 18, the rounded fold conforms to the shape of the fold blade as claimed.

In response to applicants argument regarding claim 18, Shingo shows edge 18 that is moved by slider means 36 which is adjustable. The examiner maintains the position regarding adjustability as stated supra.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene L Kim whose telephone number is 703 308-1886. The examiner can normally be reached on Tuesday-Friday 8 a.m. to 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 703 308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eugene L Kim
Primary Examiner
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